

## CLAIMS

### What is claimed is:

1. A method for reducing corrosion of a head element during rework operations, said head element being initially contained within the housing of an assembled disk drive, said method comprising the steps of:  
  
opening said housing of said disk drive;  
  
5 removing said head element from said housing of said disk drive; and  
  
applying a protective coating to said head element.
2. The method, as claimed in Claim 1, further comprising the step of cleaning said head element prior to said step of applying a protective coating.
3. The method, as claimed in Claim 1, wherein said protective coating is applied in a vacuum chamber.
4. The method, as claimed in Claim 1, wherein said protective coating is applied utilizing solvent-mediated deposition.
5. The method, as claimed in Claim 1, wherein said protective coating is applied utilizing vapor-mediated deposition.
6. The method, as claimed in Claim 1, wherein said step of applying a protective coating is performed by depositing precursor molecules in the vapor phase.

7. The method, as claimed in Claim 1, wherein said protective coating comprises a fluorocarbon polymer.

8. The method, as claimed in Claim 1, wherein said protective coating is a thickness of greater than 50.

9. The method, as claimed in Claim 1, further comprising the step of storing said head element following said step of applying said protective coating.

10. The method, as claimed in Claim 1, further comprising the step of post-processing said protective coating to enhance its corrosion protection.

11. The method, as claimed in Claim 1, further comprising the step of reworking at least one component of said disk drive.

12. The method, as claimed in Claim 10, further comprising the step of removing at least a portion of said protective coating after said step of reworking said disk drive.

13. The method, as claimed in Claim 12, further comprising the step of reassembling said disk drive after said step of removing at least a portion of said protective coating.

14. The method, as claimed in Claim 11, further comprising the step of removing at least a portion of said protective coating from said head element after said step of reworking said disk drive.

15. The method, as claimed in Claim 14, further comprising the step of reassembling said disk drive after said step of removing at least a portion of said protective coating from said head element.

16. The method, as claimed in Claim 11, further comprising the step of removing at least a portion of said protective coating completely exposing said head element after said step of reworking said disk drive.

17. The method, as claimed in Claim 16, further comprising the step of reassembling said disk drive after said step of removing at least a portion of said protective coating completely exposing said head element.

18. The method, as claimed in Claim 13, further comprising the step of testing said disk drive after said step of reassembling said disk drive.

19. The method, as claimed in Claim 11, further comprising the combination step of simultaneously cleaning said head element while removing said protective coating, after said step of reworking said disk drive.

20. The method, as claimed in Claim 12, wherein said step of removing at least a portion of said protective coating is performed utilizing a solvent.

21. The method, as claimed in Claim 19, wherein said step of simultaneously cleaning said head element while removing said protective coating, is performed using a non-aqueous solvent.

22. The method, as claimed in Claim 10, wherein said post-processing step is performed by exposing said protective coating to a form of energy selected from the group consisting of infrared, ultraviolet, plasma, or radiant heat.